

AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A method in a unified messaging server, the method comprising:
 - receiving a short message service (SMS) message by the unified messaging server according to short message peer-to-peer (SMPP) protocol;
 - accessing by the unified messaging server a subscriber directory, according to an open network protocol, for subscriber attribute information based on the received SMS message;
 - generating, based on the subscriber attribute information, at least one common format message ~~that includes~~ based on enclosing the SMS message into the common format message by the unified messaging server; and
 - supplying the common format message by the unified messaging server to a selected destination according to a selected access protocol based on the subscriber attribute information.
2. (ORIGINAL) The method of claim 1, wherein the supplying step includes storing the common format message in a subscriber message store, the selected destination corresponding to a messaging folder for a selected subscriber.
3. (ORIGINAL) The method of claim 2, wherein the supplying step further includes storing the common format message as an e-mail message according to Internet Message Access Protocol (IMAP).

4. (ORIGINAL) The method of claim 2, wherein the generating step includes generating within the at least one common format message a destination address based on the subscriber attribute information.

5. (ORIGINAL) The method of claim 4, wherein the subscriber attribute information specifies at least one of a distribution list specified by an identified source of the SMS message, and a destination preference specified by an identified destination of the SMS message.

6. (ORIGINAL) The method of claim 5, wherein the accessing step includes accessing the subscriber directory according to Lightweight Directory Access Protocol (LDAP) as the open network protocol for the subscriber attribute information.

7. (ORIGINAL) The method of claim 1, wherein the supplying step includes outputting the common format message to the selected destination according to SMTP protocol.

8. (ORIGINAL) The method of claim 1, wherein the generating step includes enclosing the SMS message within a body of a MIME data structure, and specifying within the MIME data structure that the body has an SMS type.

9. (ORIGINAL) The method of claim 1, further comprising:

second generating a new SMS message including subscriber messaging information for a

selected subscriber; and

outputting the new SMS message for the selected subscriber according to SMPP protocol.

10. (ORIGINAL) The method of claim 9, wherein the second generating step includes obtaining subscriber messaging information, specifying stored unified messages within an assigned directory for the selected subscriber, from a subscriber message store according to a prescribed open network protocol.

11. (ORIGINAL) The method of claim 10, wherein the subscriber messaging information specifies at least one of a stored SMS message, a voice message, a fax message, and an e-mail message, as a corresponding at least one of the stored unified messages.

12. (ORIGINAL) The method of claim 10, wherein the obtaining step includes obtaining the subscriber messaging information from the subscriber message store according to IMAP protocol.

13. (ORIGINAL) The method of claim 9, wherein the second generating step includes: retrieving the common format message as the subscriber messaging information from a message store having a directory for the selected subscriber; and

inserting the received SMS message, extracted from the retrieved common format message, into the new SMS message.

14. (ORIGINAL) The method of claim 9, wherein the second generating step generates the new SMS message for the selected subscriber based on the corresponding subscriber attribute information for the selected subscriber.

15. (ORIGINAL) The method of claim 9, wherein the second generating step includes: retrieving from a subscriber message store at least one of a stored SMS message, a voice message, a fax message, and an e-mail message from a directory assigned for the selected subscriber; and

inserting the at least one message into the new SMS message.

16. (ORIGINAL) The method of claim 15, wherein the inserting step includes converting the voice message into a text-based message, and inserting the text-based message into the new SMS message.

17. (ORIGINAL) A method in a communications system, the method comprising: receiving by a short message service center (SMSC) an SMS message from a SMS device;

forwarding a copy of the SMS message to a unified messaging server via short message peer-to-peer (SMPP) protocol based on SMS subscriber information determined by the SMSC based on the SMS message;

accessing subscriber attribute information by the unified messaging server based on the SMS message;

enclosing the SMS message by the unified messaging server into a common format message; and

supplying the common format message to at least one selected destination based on the subscriber attribute information.

18. (ORIGINAL) The method of claim 17, wherein the forwarding step includes:

accessing the SMS subscriber information based on at least one of the SMS source address and the SMS destination address; and

generating the copy for forwarding to the unified messaging server based on accessing the SMS subscriber information for at least one of the SMS source address and the SMS destination address.

19. (ORIGINAL) The method of claim 18, further comprising sending the SMS message to a second SMS device, having a prescribed address matching a destination address within the SMS message, according to a prescribed wireless protocol.

20. (ORIGINAL) The method of claim 17, wherein the supplying step includes storing the common format message in a subscriber message store, the at least one selected destination corresponding to a messaging folder for a selected subscriber.

21. (ORIGINAL) The method of claim 20, wherein the supplying step further includes storing the common format message as an e-mail message according to IMAP protocol.

22. (ORIGINAL) The method of claim 20, wherein the enclosing step includes generating for the common format message a destination address based on the subscriber attribute information.

23. (ORIGINAL) The method of claim 22, further comprising generating a plurality of the common format messages having respective selected destinations based on retrieval of a distribution list from the subscriber attribute information.

24. (ORIGINAL) The method of claim 23, wherein the accessing step includes accessing the subscriber attribute information according to Lightweight Directory Access Protocol (LDAP).

25. (ORIGINAL) The method of claim 17, wherein the supplying step includes outputting the common format message to the selected destination according to at least one of SMTP protocol and IMAP protocol.

26. (ORIGINAL) The method of claim 17, wherein the enclosing step includes enclosing the SMS message within a body of a MIME data structure, and specifying within the MIME data

structure that the body has an SMS type.

27. (ORIGINAL) The method of claim 17, further comprising:
generating by the unified messaging server a new SMS message including subscriber messaging information for a selected subscriber; and
outputting the new SMS message to the SMS the via SMPP protocol.

28. (ORIGINAL) The method of claim 27, wherein the generating step includes obtaining subscriber messaging information, specifying stored unified messages within an assigned directory for the selected subscriber, from a subscriber message store according to a prescribed open network protocol.

29. (ORIGINAL) The method of claim 28, wherein the subscriber messaging information specifies at least one of a stored SMS message, a voice message, a fax message, and an e-mail message, as a corresponding at least one of the stored unified messages.

30. (ORIGINAL) The method of claim 28, wherein the obtaining step includes obtaining the subscriber messaging information from the subscriber message store according to IMAP protocol.

31. (ORIGINAL) The method of claim 27, wherein the generating step includes:

retrieving the common format message as the subscriber messaging information from a message store having a directory for the selected subscriber; and

inserting the received SMS message, extracted from the retrieved common format message, into the new SMS message.

32. (ORIGINAL) The method of claim 27, wherein the generating step generates the new SMS message for the selected subscriber based on the corresponding subscriber attribute information for the selected subscriber.

33. (ORIGINAL) The method of claim 27, wherein the generating step includes:
retrieving from a subscriber message store at least one of the stored SMS message, a voice message, a fax message, and an e-mail message from a directory assigned for the selected subscriber; and
inserting the at least one message into the new SMS message.

34. (ORIGINAL) The method of claim 32, wherein the inserting step includes converting the voice message into a text-based message, and inserting the text-based message into the new SMS message.

35. (CURRENTLY AMENDED) A unified messaging server comprising:
a short message service (SMS) module configured for receiving SMS messages according

to short message peer to peer (SMPP) protocol, the SMS module configured for generating a query for subscriber attribute information based on the received SMS message, and generating at least one common format message based on the subscriber attribute information and ~~that includes~~ based on enclosing the SMS message into the at least one common format message;

a first interface resource configured for accessing the subscriber attribute information based on the query from a subscriber directory according to a prescribed open network protocol; and

a second interface resource configured for outputting the at least one common format message according to at least one of SMTP protocol and IMAP protocol.

36. (ORIGINAL) The server of claim 35, wherein the first interface resource is configured for accessing the subscriber attribute information from the subscriber directory according to LDAP protocol.

37. (ORIGINAL) The server of claim 36, wherein the SMS module is configured for generating a first common format message for storage according to IMAP protocol of the SMS message in a sent directory for a first subscriber having sent the SMS message, and a second common format message for storage of the SMS message according to IMAP protocol in a new message directory for a second subscriber identified as a recipient for the SMS message.

38. (ORIGINAL) The server of claim 36, wherein the SMS module is configured for

generating a plurality of common format messages for respective destinations based on retrieval from the subscriber attribute information of a distribution list specified by the SMS message.

39. (ORIGINAL) The server of claim 35, wherein the SMS module is configured for enclosing the SMS message within a body of a MIME data structure, and specifying within the MIME data structure that the body has an SMS type.

40. (CURRENTLY AMENDED) The server of claim 35, wherein the SMS module is configured for generating a new SMS message including subscriber messaging information for a selected subscriber, the SMS module outputting the new [[the]] SMS message for the selected subscriber according to SMPP protocol.

41. (ORIGINAL) The server of claim 40, wherein the SMS module obtains the subscriber messaging information from a subscriber message store according to IMAP protocol based on the subscriber attribute information for the corresponding selected subscriber accessed by the first interface from the subscriber directory.

42. (ORIGINAL) The server of claim 40, wherein the subscriber messaging information specifies at least one of a stored SMS message, a voice message, a fax message, and an e-mail message for the selected subscriber.

43. (CURRENTLY AMENDED) A computer readable medium having stored thereon sequences of instructions for receiving a short message service (SMS) message by a unified messaging server, the sequences of instructions including instructions for performing the steps of:

receiving a short message service (SMS) message by the unified messaging server according to short message peer-to-peer (SMPP) protocol;

accessing by the unified messaging server a subscriber directory, according to an open network protocol, for subscriber attribute information based on the received SMS message;

generating, based on the subscriber attribute information, at least one common format message ~~that includes~~ based on enclosing the SMS message into the common format message by the unified messaging server; and

supplying the common format message by the unified messaging server to a selected destination according to a selected access protocol based on the subscriber attribute information.

44. (ORIGINAL) The medium of claim 43, wherein the supplying step includes storing the common format message in a subscriber message store, the selected destination corresponding to a messaging folder for a selected subscriber.

45. (ORIGINAL) The medium of claim 44, wherein the supplying step further includes storing the common format message as an e-mail message according to Internet Message Access Protocol (IMAP).

46. (ORIGINAL) The medium of claim 44, wherein the generating step includes generating within the at least one common format message a destination address based on the subscriber attribute information.

47. (ORIGINAL) The medium of claim 46, wherein the subscriber attribute information specifies at least one of a distribution list specified by an identified source of the SMS message, and a destination preference specified by an identified destination of the SMS message.

48. (ORIGINAL) The medium of claim 47, wherein the accessing step includes accessing the subscriber directory according to Lightweight Directory Access Protocol (LDAP) as the open network protocol for the subscriber attribute information.

49. (ORIGINAL) The medium of claim 43, wherein the supplying step includes outputting the common format message to the selected destination according to SMTP protocol.

50. (ORIGINAL) The medium of claim 43, wherein the generating step includes enclosing the SMS message within a body of a MIME data structure, and specifying within the MIME data structure that the body has an SMS type.

51. (ORIGINAL) The medium of claim 43, further comprising instructions for performing the steps of:

second generating a new SMS message including subscriber messaging information for a selected subscriber; and

outputting the new SMS message for the selected subscriber according to SMPP protocol.

52. (ORIGINAL) The medium of claim 51, wherein the second generating step includes obtaining subscriber messaging information, specifying stored unified messages within an assigned directory for the selected subscriber, from a subscriber message store according to a prescribed open network protocol.

53. (ORIGINAL) The medium of claim 52, wherein the subscriber messaging information specifies at least one of a stored SMS message, a voice message, a fax message, and an e-mail message, as a corresponding at least one of the stored unified messages.

54. (ORIGINAL) The medium of claim 52, wherein the obtaining step includes obtaining the subscriber messaging information from the subscriber message store according to IMAP protocol.

55. (ORIGINAL) The medium of claim 51, wherein the second generating step includes:
retrieving the common format message as the subscriber messaging information from a message store having a directory for the selected subscriber; and
inserting the received SMS message, extracted from the retrieved common format

message, into the new SMS message.

56. (ORIGINAL) The medium of claim 51, wherein the second generating step generates the new SMS message for the selected subscriber based on the corresponding subscriber attribute information for the selected subscriber.

57. (ORIGINAL) The medium of claim 52, wherein the second generating step includes: retrieving from a subscriber message store at least one of a stored SMS message, a voice message, a fax message, and an e-mail message from a directory assigned for the selected subscriber; and

inserting the at least one message into the new SMS message.

58. (ORIGINAL) The medium of claim 57, wherein the inserting step includes converting the voice message into a text-based message, and inserting the text-based message into the new SMS message.

59. (CURRENTLY AMENDED) A unified messaging server comprising:
means for receiving a short message service (SMS) message according to short message peer-to-peer (SMPP) protocol;
means for accessing a subscriber directory, according to an open network protocol, for subscriber attribute information based on the received SMS message;

means for generating, based on the subscriber attribute information, at least one common format message ~~that includes~~ based on enclosing the SMS message into the common format message; and

means for supplying the common format message to a selected destination according to a selected access protocol based on the subscriber attribute information.

60. (ORIGINAL) The server of claim 59, wherein the supplying means is configured for storing the common format message in a subscriber message store, the selected destination corresponding to a messaging folder for a selected subscriber.

61. (ORIGINAL) The server of claim 60, wherein the supplying means is configured for storing the common format message as an e-mail message according to Internet Message Access Protocol (IMAP).

62. (ORIGINAL) The server of claim 60, wherein the generating means is configured for generating within the at least one common format message a destination address based on the subscriber attribute information.

63. (ORIGINAL) The server of claim 62, wherein the subscriber attribute information specifies at least one of a distribution list specified by an identified source of the SMS message, and a destination preference specified by an identified destination of the SMS message.

64. (ORIGINAL) The server of claim 63, wherein the accessing means is configured for accessing the subscriber directory according to Lightweight Directory Access Protocol (LDAP) as the open network protocol for the subscriber attribute information.

65. (ORIGINAL) The server of claim 59, wherein the supplying means is configured for outputting the common format message to the selected destination according to SMTP protocol.

66. (ORIGINAL) The server of claim 59, wherein the generating means includes means for enclosing the SMS message within a body of a MIME data structure, and specifying within the MIME data structure that the body has an SMS type.

67. (ORIGINAL) The server of claim 59, further comprising:
means for generating a new SMS message including subscriber messaging information for a selected subscriber; and
means for outputting the new SMS message for the selected subscriber according to SMPP protocol.

68. (ORIGINAL) The server of claim 67, wherein the means for generating a new SMS message is configured for obtaining subscriber messaging information, specifying stored unified messages within an assigned directory for the selected subscriber, from a subscriber message store according to a prescribed open network protocol.

69. (ORIGINAL) The server of claim 68, wherein the subscriber messaging information specifies at least one of a stored SMS message, a voice message, a fax message, and an e-mail message, as a corresponding at least one of the stored unified messages.

70. (ORIGINAL) The server of claim 68, wherein the means for generating a new SMS message is configured for obtaining the subscriber messaging information from the subscriber message store according to IMAP protocol.

71. (ORIGINAL) The server of claim 67, wherein the means for generating the new SMS message is configured for retrieving the common format message as the subscriber messaging information from a message store having a directory for the selected subscriber, inserting the received SMS message, extracted from the retrieved common format message, into the new SMS message.

72. (ORIGINAL) The server of claim 67, wherein the means for generating the new SMS message is configured for generating the new SMS message for the selected subscriber based on the corresponding subscriber attribute information for the selected subscriber.

73. (ORIGINAL) The server of claim 67, wherein the means for generating the new SMS message is configured for retrieving from a subscriber message store at least one of a stored SMS

message, a voice message, a fax message, and an e-mail message from a directory assigned for the selected subscriber, and inserting the at least one message into the new SMS message.

74. (ORIGINAL) The server of claim 73, further comprising means for converting the voice message into a text-based message, the means for generating the new SMS message inserting the text-based message into the new SMS message.

75. (PREVIOUSLY PRESENTED) The method of claim 17, wherein the accessing step includes accessing a subscriber directory according to an open network protocol for the subscriber attribute information.

76. (PREVIOUSLY PRESENTED) The method of claim 75, wherein the step of accessing the subscriber directory includes generating a query according to LDAP protocol.